REMARKS

I. Office Action Summary

Claims 1-5, 7, and 21-30 are pending. Claims 1, 21, and 26 are the independent claims. In the Office Action mailed May 30, 2007, the Examiner rejected the following claims in the following combinations on the ground of nonstatutory obvious-type double patenting:

Claims	Examiner-cited Reference
1-5, 7	Claims 1-5 and 7 of Lund (US 5,949,763) in view of Berkley et al. (US 6,546,005 B1)
21-23, 25	Claims 2-3 and 5 of Lund (US 6,370,137 B1)
21, 24	Claim 1 of Lund (US 6,370,137 B1).
26-30	Claims 6-10 of Lund (US 6,370,137 B1)

Claims 1, 3-4, 7, 21, 23, and 25 were rejected as anticipated under 35 U.S.C. §102(e) by Dunn et al. (US 5,916,302).

The Examiner rejected the following claims in the following combinations as obvious under 35 U.S.C. §103(a):

Claims	Examiner-cited Reference Combination
2, 5, 22, 26, 27, 29, 30	Dunn et al. and Berkley et al.
24	Dunn et al., Berkley et al., and Fukuoka et al. (U.S. 5,914,940)
28	Dunn et al., Berkley et al., and DeSimone et al. (U.S. 6,138,144)

II. Double Patenting Rejections

A. Rejection of Claims 1-5 and 7 on the ground of nonstatutory obvious-type double patenting over Claims 1-5 and 7 of Lund (US 5,949,763) in view of Berkley et al. (US 6,546,005 B1)

Applicant respectfully disagrees with the Examiner's rejection of Claims 1-5 and 7 based on obviousness-type double patenting. However, Applicant provides a terminal disclaimer to obviate this rejection in order to expedite the issuance of a Notice of Allowance. Claims 2-5 and 7 depend on independent Claim 1, and therefore their allowability directly follows from the allowability of Claim 1.

B. Rejection of Claims Claims 21-30 on the ground of nonstatutory obvious-type double patenting over Claims 1-3, 5-6, and 10 Lund (US 6,370,137 B1)

Applicant respectfully disagrees with the Examiner's rejection of Claims 21-30 based on obviousness-type double patenting. However, Applicant provides a terminal disclaimer to obviate this rejection in order to expedite the issuance of a Notice of Allowance. Claims 22-25 depend on independent Claim 21, and therefore their allowability directly follows from the allowability of Claim 21. Claims 27-30 depend on independent Claim 26, and therefore their allowability directly follows from the allowability of Claim 26.

III. Rejections Under 35 U.S.C. § 102(e)

A. Introduction

Claims 1, 3-4, 7, 21, 23, and 25 were rejected as anticipated under 35 U.S.C. §102(e) by Dunn et al. (US 5,916,302). Applicant respectfully requests reconsideration and withdrawal of the rejections for the reasons set forth below.

B. Rejection of Claims 1, 3-4, and 7 as anticipated under 35 U.S.C. §102(e) by Dunn et al. (US 5,916,302)

Claim 1 recites, inter alia:

receiving a telephone call from a calling party at a telephony network;

establishing a voice channel over the telephony network between a called party and the calling party; and,

automatically establishing a separate, parallel virtual data channel between the called party and the calling party over a packet data network, wherein a voice communication between the called party and the calling party is carried over the voice channel of the telephony network and a data communication between the called party and the calling party is carried over the separate virtual data channel of the packet data network.

The Examiner maintains in the present office action that the limitation of "automatically establishing a separate, parallel virtual data channel" is satisfied by Dunn. Applicant respectfully disagrees. As will be further elaborated below, Dunn merely discloses participants establishing separate voice and data connections on their own.

The Examiner states that Dunn Figure 6, Reference 37, discloses establishing a voice channel over the telephony network between a called party and the calling party. Applicant respectfully disagrees, because "Participants establish separate conference connections to PSTN" in Dunn Figure 6, Reference 36, before "Participants converse over PSTN and exchange data via server" in Reference 37. Thus, in Dunn Figure 6, Reference 36, a participant telephone call is received at the telephony network, and participants establish their own voice channel and data channel.

The Examiner states that Dunn Figure 6a, Reference 41, discloses "automatic establishment of a data channel between the called party and the calling party." Applicant respectfully disagrees. In Column 10, line 16, Dunn states that "Fig. 6a elaborates on the functions indicated in Figure 6." However, Dunn Figure 6a References 40-43 do not elaborate the Figure 6, Reference 36 function of "Participants establish separate conference connections...." Therefore, Applicant respectfully submits that Dunn Figure 6a does not elaborate how connections are established, but rather, explains what happens once a connection has been established.

In Column 6, lines 56-61, Dunn discloses that in the prior art, the data channel is not established automatically, so participants must establish separate voice and data linkages on their own:

> "FIG. 5 shows how a conference session is established and maintained in the prior art environment shown in FIGS. 1 and 2. As shown at 23, each participant establishes separate linkages to the PSTN and to a server such as 12 in the data networkweb, the former exclusively for voice contact and the latter exclusively for data inter-change."

In Column 7, lines 6-11, Dunn suggests that participants are forced establish separate linkages because the voice and data conferences components are "uncoordinatable."

Dunn does not disclose an automatic establishment of a data channel. Rather, Dunn discloses the same means of establishing a channel that Dunn described as the prior art, equating this aspect of the invention with the prior art in Column 9, lines 9-11:

> "As indicated at 36, conference participants in both voice and data aspects of a conference still establish parallel voice and data connections over physically or logically separate lines extending to the PSTN and data network."

Comparison of the prior art in Figure 5, Reference 23 ("Participants establish separate conference connections...") with Dunn's invention in Figure 6, Reference 36 ("Participants establish separate conference connections...") also shows that this aspect of Dunn's invention is identical to the prior art, and does not disclose an automatic establishment of a data channel. Like the prior art in Figure 5, Dunn discloses an invention in Figure 6 that requires participants to establish separate voice and data connections on their own.

Applicant respectfully submits that, for at least these reasons, Claim 1 is allowable over the art of record. Claims 3-4 and 7 are dependent claims, and therefore their allowability directly follows from the allowability of independent Claim 1. Reconsideration is requested.

C. Rejection of Claims 21, 23, and 25 as anticipated under 35 U.S.C. §102(e) by Dunn et al. (US 5,916,302)

Claim 21 recites, inter alia:

receiving a telephone call from a calling party at a telephony network;

establishing a voice channel over the telephony network between a called party and the calling party;

automatically establishing a virtual data channel between the called party and the calling party on a packet data network after a voice conversation begins over the voice channel, wherein the voice channel and the virtual data channel operate in parallel to provide a synchronized voice and data transmission between the calling party and the called party.

Examiner maintains in the present office action that Dunn satisfies Claim 21's limitation of "automatically establishing a virtual data channel between the called party and the calling party on a packet data network after a voice conversation begins over the voice channel." Applicant respectfully disagrees. Dunn merely discloses participants establishing separate voice and data connections on their own.

The Examiner maintains that Dunn Figure 6, Reference 37, discloses establishing a voice channel over the telephony network between a called party and the calling party. However, a telephone call has already been received at the telephony network, and participants establish their own voice channel and data channel before Dunn Figure 6, Reference 37, because "Participants establish separate conference connections to PSTN" in Dunn Figure 6, Reference 36, before "Participants converse over PSTN and exchange data via server" in Reference 37.

The Examiner states that "automatic establishment of a data channel between the called party and the calling party" is disclosed in Dunn Figure 6a, Reference 41. Applicant respectfully disagrees. In Column 10, line 16, Dunn states that "Fig. 6a elaborates on the functions indicated in Figure 6." However, Dunn Figure 6a References 40-43 do not elaborate the Figure 6, Reference 36 function of "Participants establish separate conference connections...." Therefore, Applicant respectfully submits that Dunn Figure 6a does not disclose how connections are established, but rather, explains what happens once a connection is established.

In Column 6, lines 56-61, Dunn discloses that in the prior art, the data channel is not established automatically, so participants must establish separate voice and data linkages on their own:

> "FIG. 5 shows how a conference session is established and maintained in the prior art environment shown in FIGS. 1 and 2. As shown at 23, each participant establishes separate linkages to the PSTN and to a server such as 12 in the data networkweb, the former exclusively for voice contact and the latter exclusively for data inter-change."

In Column 7, lines 6-11, Dunn suggests that participants are forced establish separate linkages because the voice and data conferences components are "uncoordinatable."

Dunn does not disclose an automatic establishment of a data channel. Rather, Dunn discloses the same means of establishing a channel that Dunn described as the prior art, equating this aspect of the invention with the prior art in Column 9, lines 9-11:

> "As indicated at 36, conference participants in both voice and data aspects of a conference still establish parallel voice and data connections over physically or logically separate lines extending to the PSTN and data network."

Comparison of Dunn Figure 5, Reference 23 ("Participants establish separate conference connections...") with Dunn Figure 6, Reference 36 ("Participants establish separate conference connections...") confirms that Dunn does not disclose an automatic establishment of a data connection. Like the prior art in Figure 5, Dunn discloses an invention that requires participants to establish separate voice and data connections on their own.

For at least these reasons, Claim 21 is allowable over the art of record. Claims 23 and 25 are dependent claims, and therefore their allowability directly follows from the allowability of independent Claim 21. Reconsideration is requested.

IV.   Rejections Under 35 U.S.C. § 103(a)

A.   Introduction

The Examiner rejected the following claims in the following combinations as obvious under 35 U.S.C. §103(a):

Claims	Examiner-cited Reference Combination
2, 5, 22, 26, 27, 29, 30	Dunn et al. and Berkley et al.
24	Dunn et al., Berkley et al., and Fukuoka et al. (U.S. 5,914,940)
28	Dunn et al., Berkley et al., and DeSimone et al. (U.S. 6,138,144)

Applicant respectfully requests reconsideration and withdrawal of the rejections for the reasons set forth below.

B.   Rejection of Claims 2 and 5 as obvious under 35 U.S.C. §103(a) over the combination of Dunn et al. and Berkley et al.

Applicant respectfully maintains that the combination of Dunn and Berkley does not teach all of the limitations of Claims 2 and 5, because Dunn and Berkley, individually or in combination, do not teach all of the limitations of independent Claim 1. Claim 1 recites, inter alia:

> receiving a telephone call from a calling party at a telephony network;
> establishing a voice channel over the telephony network between a called party and the calling party; and,
> automatically establishing a separate, parallel virtual data channel between the called party and the calling party over a packet data network, wherein a voice communication between the called party and the calling party is carried over the voice channel of the telephony network and a data communication between the called party and the calling party is carried over the separate virtual data channel of the packet data network.

The Examiner maintains in the present office action that Dunn teaches all of the limitations of independent Claim 1. Applicant respectfully disagrees. Dunn

does not teach "automatically establishing a separate, parallel virtual data channel between the called party and the calling party." Rather, Dunn merely discloses each conference participant establishing separate voice and data connections – no connection is automatically established for a participant.

The Examiner states that Dunn Figure 6, Reference 37, discloses establishing a voice channel over the telephony network between a called party and the calling party. Applicant respectfully disagrees, because "Participants establish separate conference connections to PSTN" in Dunn Figure 6, Reference 36, before "Participants converse over PSTN and exchange data via server" in Reference 37. Thus, in Dunn Figure 6, Reference 36, a participant telephone call is received at the telephony network, and participants establish their own voice channel and data channel.

The Examiner states that Dunn Figure 6a, Reference 41, discloses "automatic establishment of a data channel between the called party and the calling party." Applicant respectfully disagrees. In Column 10, line 16, Dunn states that "Fig. 6a elaborates on the functions indicated in Figure 6." However, Dunn Figure 6a References 40-43 do not elaborate the Figure 6, Reference 36 function of "Participants establish separate conference connections...." Therefore, Applicant respectfully submits that Dunn Figure 6a does not elaborate how connections are established, but rather, explains what happens once a connection has been established.

In Column 6, lines 56-61, Dunn discloses that in the prior art, the data channel is not established automatically, so participants must establish separate voice and data linkages on their own:

> "FIG. 5 shows how a conference session is established and maintained in the prior art environment shown in FIGS. 1 and 2. As shown at 23, each participant establishes separate linkages to the PSTN and to a server such as 12 in the data networkweb, the former exclusively for voice contact and the latter exclusively for data inter-change."

In Column 7, lines 6-11, Dunn suggests that participants are forced establish separate linkages because the voice and data conferences components are "uncoordinatable."

Dunn does not disclose an automatic establishment of a data channel. Rather, Dunn discloses the same means of establishing a channel that Dunn described as the prior art, equating this aspect of the invention with the prior art in Column 9, lines 9-11:

> "As indicated at 36, conference participants in both voice and data aspects of a conference still establish parallel voice and data connections over physically or logically separate lines extending to the PSTN and data network."

Comparison of the prior art in Figure 5, Reference 23 ("Participants establish separate conference connections...") with Dunn's invention in Figure 6, Reference 36 ("Participants establish separate conference connections...") also shows that this aspect of Dunn's invention is identical to the prior art, and does not disclose an automatic establishment of a data channel. Like the prior art in Figure 5, Dunn discloses an invention in Figure 6 that requires participants to establish separate voice and data connections on their own. Therefore, Dunn does not teach the limitation of independent Claim 1 of "automatically establishing a separate, parallel virtual data channel between the called party and the calling party."

Furthermore, Berkley does not disclose establishing a voice channel and automatically establishing a separate, parallel virtual data channel. Berkley discloses establishing one communications channel in response to a user request. For instance, Berkley Figure 3A, Reference 301 discloses contacting a database to find contact information for another user. The database returns a contact address in Figure 3A, Reference 305, and the user establishes a channel using that address in Figure 3A, Reference 306. In Column 13, lines 27-33, Berkley discloses that the user's database inquiry could also trigger the establishment of the communications channel after the database inquiry is complete:

> "As a further enhancement, the AUR system could, as referred to above in the examples, automatically initiate the communications indicated from the AUR database, such that, for example, a telephone call could automatically be dialed (e.g., in response to a voice command or click-to-dial) or an e-mail message automatically

addressed, or a link to a URL address automatically initiated using a Web browser."

Stated another way, Berkley discloses the user performing one action (instead of two) to initiate a database inquiry and initiate a communications channel using database result. Berkley discloses in Column 13, lines 37-41 that this feature is not limited to the examples provided, noting that "use of any number of communications options indicated to the subscriber through the AUR system could be automatically initiated in accordance with the features of the present invention." Where a communication message is not converted between formats, Berkley only discloses that a single user database query could establish one communications channel. (Figure 3A, Reference 306; Figure 3B, Reference 316; Figure 3C, Reference 326; Claim 11, "The system according to claim 1, wherein the system further initiates a communications contact to the user.") Berkley does not disclose establishment of one communications channel and automatic establishment of another communications channel in response to a single user action. Therefore, Berkley does not teach the limitations of independent Claim 1 of "establishing a voice channel over the telephony network between a called party and the calling party; and, automatically establishing a separate, parallel virtual data channel between the called party and the calling party."

Both Dunn and Berkley are missing at least the element of independent Claim 1 relating to "automatically establishing a separate, parallel virtual data channel between the called party and the calling party over a packet data network." Accordingly, any combination of Dunn and Berkley also lacks this element of independent Claim 1. Applicant respectfully submits that, for at least these reasons, independent Claim 1 is allowable over the art of record. Claims 2 and 5 are dependent claims, and therefore their allowability directly follows from the allowability of independent Claim 1. Reconsideration is requested.

C.   Rejection of Claim 22 as obvious under 35 U.S.C. §103(a) over the combination of Dunn et al. and Berkley et al.

Applicant respectfully maintains that the combination of Dunn and Berkley does not teach all of the limitations of Claim 22, because Dunn and Berkley, individually or in combination, do not teach all of the limitations of independent Claim 21. Claim 21 recites, inter alia:

> receiving a telephone call from a calling party at a telephony network;
> establishing a voice channel over the telephony network between a called party and the calling party;
> automatically establishing a virtual data channel between the called party and the calling party on a packet data network after a voice conversation begins over the voice channel, wherein the voice channel and the virtual data channel operate in parallel to provide a synchronized voice and data transmission between the calling party and the called party.

The Examiner states in the present office action that Dunn teaches all of the limitations of independent Claim 21. Applicant respectfully disagrees. Dunn does not teach "automatically establishing a virtual data channel between the called party and the calling party on a packet data network after a voice conversation begins over the voice channel." Rather, Dunn merely discloses each conference participant establishing separate voice and data connections, where no connection is automatically established for a participant.

The Examiner maintains that Dunn Figure 6, Reference 37, discloses establishing a voice channel over the telephony network between a called party and the calling party. Applicant respectfully disagrees, because "Participants establish separate conference connections to PSTN" in Dunn Figure 6, Reference 36, before "Participants converse over PSTN and exchange data via server" in Reference 37. Thus, in Dunn Figure 6, Reference 36, a participant telephone call is received at the telephony network, and participants establish their own voice channel and data channel.

The Examiner states that Dunn Figure 6a, Reference 41, discloses "automatic establishment of a data channel between the called party and the calling party." Applicant respectfully disagrees. In Column 10, line 16, Dunn states that "Fig. 6a elaborates on the functions indicated in Figure 6." However,

Dunn Figure 6a References 40-43 do not elaborate the Figure 6, Reference 36 function of "Participants establish separate conference connections...." Therefore, Applicant respectfully submits that Dunn Figure 6a does not elaborate how connections are established, but rather, details what happens once a connection has been established.

In Column 6, lines 56-61, Dunn discloses that in the prior art, the data channel is not established automatically, so participants must establish separate voice and data linkages on their own:

> "FIG. 5 shows how a conference session is established and maintained in the prior art environment shown in FIGS. 1 and 2. As shown at 23, each participant establishes separate linkages to the PSTN and to a server such as 12 in the data networkweb, the former exclusively for voice contact and the latter exclusively for data inter-change."

In Column 7, lines 6-11, Dunn suggests that participants must establish separate linkages because the voice and data conferences components are "uncoordinatable."

Dunn does not disclose an automatic establishment of a data channel. Rather, Dunn discloses the same means of establishing a channel that Dunn described as the prior art, equating this aspect of the invention with the prior art in Column 9, lines 9-11:

> "As indicated at 36, conference participants in both voice and data aspects of a conference still establish parallel voice and data connections over physically or logically separate lines extending to the PSTN and data network."

Comparison of the prior art in Figure 5, Reference 23 ("Participants establish separate conference connections...") with Dunn's invention in Figure 6, Reference 36 ("Participants establish separate conference connections...") also shows that this aspect of Dunn's invention is identical to the prior art, and does not disclose an automatic establishment of a data channel. Like the prior art in Figure 5, Dunn discloses an invention in Figure 6 that requires participants to establish separate voice and data connections on their own. Therefore, Dunn does not teach the limitation of independent Claim 21 of "automatically

establishing a virtual data channel between the called party and the calling party."

Further, Berkley does not disclose establishing a voice channel and automatically establishing a virtual data channel. Berkley discloses establishing one communications channel in response to a user request. For example, Figure 3A, Reference 301 of Berkley discloses contacting a database to find contact information for another user. The contact address is returned from the database in Figure 3A, Reference 305, and the user establishes a channel using that address in Figure 3A, Reference 306. In Column 13, lines 27-33, Berkley discloses that the user-initiated establishment of the communications channel could occur as a result of the user's database inquiry instead:

> "As a further enhancement, the AUR system could, as referred to above in the examples, automatically initiate the communications indicated from the AUR database, such that, for example, a telephone call could automatically be dialed (e.g., in response to a voice command or click-to-dial) or an e-mail message automatically addressed, or a link to a URL address automatically initiated using a Web browser."

In other words, Berkley discloses the user performing one action (instead of two) to initiate a database inquiry and initiate a communications channel using database result. Berkley discloses in Column 13, lines 37-41 that this feature is not limited to the examples provided, noting that "use of any number of communications options indicated to the subscriber through the AUR system could be automatically initiated in accordance with the features of the present invention." Where a communication message is not converted between formats, Berkley only discloses that a single user database query could establish one communications channel. (Figure 3A, Reference 306; Figure 3B, Reference 316; Figure 3C, Reference 326; Claim 11, "The system according to claim 1, wherein the system further initiates a communications contact to the user.") Berkley does not disclose establishment of one communications channel and automatic establishment of another communications channel in response to a single user action. Therefore, Berkley does not teach the limitation of independent Claim 21 of "automatically establishing a virtual data channel between the called party and

the calling party on a packet data network after a voice conversation begins over the voice channel."

Accordingly, because both Dunn and Berkley are missing at least the element of independent Claim 21 relating to "automatically establishing a virtual data channel between the called party and the calling party on a packet data network after a voice conversation begins over the voice channel," any combination of Dunn and Berkley also lacks this element. Applicant respectfully submits that, for at least these reasons, independent Claim 21 is allowable over the art of record. Claim 22 is a dependent claim, and therefore its allowability directly follows from the allowability of independent Claim 21. Reconsideration is requested.

D. Rejection of Claims 26, 27, 29, and 30 as obvious under 35 U.S.C. §103(a) over the combination of Dunn et al. and Berkley et al.

Applicant respectfully maintains that the combination of Dunn and Berkley does not teach all of the limitations of Claims 26, 27, 29, and 30, because Dunn and Berkley individually, or in combination, do not teach all of the limitations of independent Claim 26. Claim 26 recites, inter alia:

> receiving a telephone call from a calling party over a subscriber loop in communication with a telephony network;
> establishing a voice channel from the calling party to the called party over the telephony network via the subscriber loop; and,
> automatically, and in response to receiving the telephone call, determining a data address for the calling party on a data network and a data address for a called party on the data network, and establishing a virtual data channel from the calling party to the called party over the data network via the subscriber loop, wherein the voice channel carries voice information and the virtual data channel carries non-voice information concurrently over the subscriber loop.

The Examiner maintains in the present office action that Dunn satisfies Claim 26's limitation of "automatically, and in response to receiving the telephone call, determining a data address for the calling party on a data network and a data address for a called party on the data network, and establishing a virtual

data channel from the calling party to the called party over the data network via the subscriber loop." Applicant respectfully disagrees. Dunn merely discloses participants establishing separate voice and data connections on their own.

The Examiner maintains that Dunn Figure 6, Reference 37, discloses establishing a voice channel over the telephony network between a called party and the calling party. However, a telephone call has already been received at the telephony network, and participants establish their own voice channel and data channel before Dunn Figure 6, Reference 37, because "Participants establish separate conference connections to PSTN" in Dunn Figure 6, Reference 36, before "Participants converse over PSTN and exchange data via server" in Reference 37.

The Examiner states that "automatic establishment of a data channel between the called party and the calling party" is disclosed in Dunn Figure 6a, Reference 41. Applicant respectfully disagrees. In Column 10, line 16, Dunn states that "Fig. 6a elaborates on the functions indicated in Figure 6." However, Dunn Figure 6a References 40-43 do not elaborate the Figure 6, Reference 36 function of "Participants establish separate conference connections...." Therefore, Applicant respectfully submits that Dunn Figure 6a does not disclose how connections are established, but rather, explains what happens once a connection is established.

In Column 6, lines 56-61, Dunn discloses that in the prior art, the data channel is not established automatically, so participants must establish separate voice and data linkages on their own:

> "FIG. 5 shows how a conference session is established and maintained in the prior art environment shown in FIGS. 1 and 2. As shown at 23, each participant establishes separate linkages to the PSTN and to a server such as 12 in the data networkweb, the former exclusively for voice contact and the latter exclusively for data inter-change."

In Column 7, lines 6-11, Dunn suggests that participants are forced establish separate linkages because the voice and data conferences components are "uncoordinatable."

Dunn does not disclose an automatic establishment of a data channel. Rather, Dunn discloses the same means of establishing a channel that Dunn described as the prior art, equating this aspect of the invention with the prior art in Column 9, lines 9-11:

> "As indicated at 36, conference participants in both voice and data aspects of a conference still establish parallel voice and data connections over physically or logically separate lines extending to the PSTN and data network."

Comparison of Dunn Figure 5, Reference 23 ("Participants establish separate conference connections...") with Dunn Figure 6, Reference 36 ("Participants establish separate conference connections...") confirms that Dunn does not disclose an automatic establishment of a data connection. Like the prior art in Figure 5, Dunn discloses an invention that requires participants to establish separate voice and data connections on their own. Therefore, Dunn does not teach the limitation of independent Claim 26 of "automatically, and in response to receiving the telephone call ... establishing a virtual data channel from the calling party to the called party over the data network via the subscriber loop."

Further, Berkley does not disclose establishing a voice channel and automatically establishing a virtual data channel in response to receiving a telephone call. Berkley discloses establishing one communications channel in response to a user request. For example, Figure 3A, Reference 301 of Berkley discloses contacting a database to find contact information for another user. The contact address is returned from the database in Figure 3A, Reference 305, and the user establishes a channel using that address in Figure 3A, Reference 306. In Column 13, lines 27-33, Berkley discloses that the user-initiated establishment of the communications channel could occur as a result of the user's database inquiry instead:

> "As a further enhancement, the AUR system could, as referred to above in the examples, automatically initiate the communications indicated from the AUR database, such that, for example, a telephone call could automatically be dialed (e.g., in response to a voice command or click-to-dial) or an e-mail message automatically addressed, or a link to a URL address automatically initiated using a Web browser."

In other words, Berkley discloses the user performing one action (instead of two) to initiate a database inquiry and initiate a communications channel using database result. Berkley discloses in Column 13, lines 37-41 that this feature is not limited to the examples provided, noting that "use of any number of communications options indicated to the subscriber through the AUR system could be automatically initiated in accordance with the features of the present invention." Where a communication message is not converted between formats, Berkley only discloses that a single user database query could establish one communications channel. (Figure 3A, Reference 306; Figure 3B, Reference 316; Figure 3C, Reference 326; Claim 11, "The system according to claim 1, wherein the system further initiates a communications contact to the user.") Berkley does not disclose establishment of one communications channel and automatic establishment of another communications channel in response to a single user action. Therefore, Berkley does not teach automatically establishing a data channel in response to receiving a telephone call.

Dunn and Berkley are missing at least the element of Claim 26 relating to "automatically, and in response to receiving the telephone call, determining a data address for the calling party on a data network and a data address for a called party on the data network, and establishing a virtual data channel from the calling party to the called party over the data network via the subscriber loop." Therefore, any combination of Dunn, Berkley, and DeSimone also lacks this element of independent Claim 26. Applicant respectfully submit that, for at least these reasons, Claim 26 is allowable over the art of record. Claims 28 is a dependent claim, and therefore its allowability directly follows from the allowability of independent Claim 26. Reconsideration is requested.

E. Rejection of Claim 24 as obvious under 35 U.S.C. §103(a) over the combination of Dunn et al., Berkley et al., and Fukuoka et al. (U.S. 5,914,940)

Applicant respectfully maintains that the combination of Dunn, Berkley, and Fukuoka does not teach all of the limitations of Claim 24, because Dunn,

Berkley and Fukuoka, individually, or in combination, do not teach all of the limitations of independent Claim 21. Claim 21 recites, inter alia:

> receiving a telephone call from a calling party at a telephony network;
> establishing a voice channel over the telephony network between a called party and the calling party;
> automatically establishing a virtual data channel between the called party and the calling party on a packet data network after a voice conversation begins over the voice channel, wherein the voice channel and the virtual data channel operate in parallel to provide a synchronized voice and data transmission between the calling party and the called party.

The Examiner maintains in the present office action that Dunn satisfies Claim 21's limitation of "automatically establishing a separate, parallel virtual data channel." Applicant respectfully disagrees. Dunn merely discloses participants establishing separate voice and data connections on their own.

The Examiner maintains that Dunn Figure 6, Reference 37, discloses establishing a voice channel over the telephony network between a called party and the calling party. However, a telephone call has already been received at the telephony network, and participants establish their own voice channel and data channel before Dunn Figure 6, Reference 37, because "Participants establish separate conference connections to PSTN" in Dunn Figure 6, Reference 36, before "Participants converse over PSTN and exchange data via server" in Reference 37.

The Examiner states that "automatic establishment of a data channel between the called party and the calling party" is disclosed in Dunn Figure 6a, Reference 41. Applicant respectfully disagrees. In Column 10, line 16, Dunn states that "Fig. 6a elaborates on the functions indicated in Figure 6." However, Dunn Figure 6a References 40-43 do not elaborate the Figure 6, Reference 36 function of "Participants establish separate conference connections...." Therefore, Applicant respectfully submits that Dunn Figure 6a does not disclose how connections are established, but rather, explains what happens once a connection is established.

In Column 6, lines 56-61, Dunn discloses that in the prior art, the data channel is not established automatically, so participants must establish separate voice and data linkages on their own:

> "FIG. 5 shows how a conference session is established and maintained in the prior art environment shown in FIGS. 1 and 2. As shown at 23, each participant establishes separate linkages to the PSTN and to a server such as 12 in the data networkweb, the former exclusively for voice contact and the latter exclusively for data inter-change."

In Column 7, lines 6-11, Dunn suggests that participants are forced establish separate linkages because the voice and data conferences components are "uncoordinatable."

Dunn does not disclose an automatic establishment of a data channel. Rather, Dunn discloses the same means of establishing a channel that Dunn described as the prior art, equating this aspect of the invention with the prior art in Column 9, lines 9-11:

> "As indicated at 36, conference participants in both voice and data aspects of a conference still establish parallel voice and data connections over physically or logically separate lines extending to the PSTN and data network."

Comparison of Dunn Figure 5, Reference 23 ("Participants establish separate conference connections…") with Dunn Figure 6, Reference 36 ("Participants establish separate conference connections…") confirms that Dunn does not disclose an automatic establishment of a data connection. Like the prior art in Figure 5, Dunn discloses an invention that requires participants to establish separate voice and data connections on their own. Therefore, Dunn does not teach the limitation of independent Claim 21 of "automatically establishing a virtual data channel between the called party and the calling party."

Further, Berkley does not disclose establishing a voice channel and automatically establishing a virtual data channel. Berkley discloses establishing one communications channel in response to a user request. For example, Berkley Figure 3A, Reference 301 discloses contacting a database to find contact information for another user. The contact address is returned from the database in Figure 3A, Reference 305, and the user establishes a channel using

that address in Figure 3A, Reference 306. In Column 13, lines 27-33, Berkley discloses that the user-initiated establishment of the communications channel could occur as a result of the user's database inquiry instead:

> "As a further enhancement, the AUR system could, as referred to above in the examples, automatically initiate the communications indicated from the AUR database, such that, for example, a telephone call could automatically be dialed (e.g., in response to a voice command or click-to-dial) or an e-mail message automatically addressed, or a link to a URL address automatically initiated using a Web browser."

In other words, Berkley discloses the user performing one action (instead of two) to initiate a database inquiry and initiate a communications channel using database result. Berkley discloses in Column 13, lines 37-41 that this feature is not limited to the examples provided, noting that "use of any number of communications options indicated to the subscriber through the AUR system could be automatically initiated in accordance with the features of the present invention." Where a communication message is not converted between formats, Berkley only discloses that a single user database query could establish one communications channel. (Figure 3A, Reference 306; Figure 3B, Reference 316; Figure 3C, Reference 326; Claim 11, "The system according to claim 1, wherein the system further initiates a communications contact to the user.") Berkley does not disclose establishment of one communications channel and automatic establishment of another communications channel in response to a single user action. Therefore, Berkley does not teach the limitation of independent Claim 21 of "automatically establishing a virtual data channel between the called party and the calling party on a packet data network after a voice conversation begins over the voice channel."

Fukoka does not disclose "automatically establishing a virtual data channel between the called party and the calling party on a packet data network after a voice conversation begins over the voice channel." Rather, Figure 1 and Figure 4 of Fukoka disclose a video conference control unit 1 containing a communicating device 12, and video conference terminals 21 – 2n. Fukuoka Column 5, lines 22-27 merely states that the video conference control unit is

"connected" to the video conference terminals. Besides being connected, Fukuoka only discloses in Column 5, lines 29-31 and 45-48 that the controlling unit and video conference transmit and receive video and audio data. Fukuoka does not disclose how audio or video channels are established. Hence, Fukuoka does not teach "automatic establishment of a virtual data channel."

Dunn, Berkley, and Fukuoka are missing at least the element of Claim 21 relating to "automatically establishing a virtual data channel between the called party and the calling party on a packet data network after a voice conversation begins over the voice channel, wherein the voice channel and the virtual data channel operate in parallel to provide a synchronized voice and data transmission between the calling party and the called party." Therefore, any combination of Dunn, Berkley, and Fukuoka also lacks this element of independent Claim 21. Applicant respectfully submits that, for at least these reasons, Claim 21 is allowable over the art of record. Claims 24 is a dependent claim, and therefore its allowability directly follows from the allowability of independent Claim 21. Reconsideration is requested.

F. **Rejection of Claim 28 as obvious under 35 U.S.C. §103(a) over the combination of Dunn et al., Berkley et al., and DeSimone et al. (U.S. 6,138,144)**

Applicant respectfully maintains that the combination of Dunn, Berkley, and DeSimone does not teach all of the limitations of Claim 28, because Dunn, Berkley and DeSimone, individually, or in combination, do not teach all of the limitations of independent Claim 26. Claim 26 recites, inter alia:

> receiving a telephone call from a calling party over a subscriber loop in communication with a telephony network;
> establishing a voice channel from the calling party to the called party over the telephony network via the subscriber loop; and,
> automatically, and in response to receiving the telephone call, determining a data address for the calling party on a data network and a data address for a called party on the data network, and establishing a virtual data channel from the calling party to the called party over the data network via the subscriber loop, wherein the voice channel carries voice information and the virtual data

channel carries non-voice information concurrently over the
subscriber loop.

The Examiner maintains in the present office action that Dunn satisfies
Claim 26's limitation of "automatically, and in response to receiving the telephone
call, determining a data address for the calling party on a data network and a
data address for a called party on the data network, and establishing a virtual
data channel from the calling party to the called party over the data network via
the subscriber loop." Applicant respectfully disagrees. Dunn merely discloses
participants establishing separate voice and data connections on their own.

The Examiner maintains that Dunn Figure 6, Reference 37, discloses
establishing a voice channel over the telephony network between a called party
and the calling party. However, a telephone call has already been received at
the telephony network, and participants establish their own voice channel and
data channel before Dunn Figure 6, Reference 37, because "Participants
establish separate conference connections to PSTN" in Dunn Figure 6,
Reference 36, before "Participants converse over PSTN and exchange data via
server" in Reference 37.

The Examiner states that "automatic establishment of a data channel
between the called party and the calling party" is disclosed in Dunn Figure 6a,
Reference 41. Applicant respectfully disagrees. In Column 10, line 16, Dunn
states that "Fig. 6a elaborates on the functions indicated in Figure 6." However,
Dunn Figure 6a References 40-43 do not elaborate the Figure 6, Reference 36
function of "Participants establish separate conference connections...."
Therefore, Applicant respectfully submits that Dunn Figure 6a does not disclose
how connections are established, but rather, explains what happens once a
connection is established.

In Column 6, lines 56-61, Dunn discloses that in the prior art, the data
channel is not established automatically, so participants must establish separate
voice and data linkages on their own:

> "FIG. 5 shows how a conference session is established and
> maintained in the prior art environment shown in FIGS. 1 and 2. As
> shown at 23, each participant establishes separate linkages to the

PSTN and to a server such as 12 in the data networkweb, the former exclusively for voice contact and the latter exclusively for data inter-change."

In Column 7, lines 6-11, Dunn suggests that participants are forced establish separate linkages because the voice and data conferences components are "uncoordinatable."

Dunn does not disclose an automatic establishment of a data channel. Rather, Dunn discloses the same means of establishing a channel that Dunn described as the prior art, equating this aspect of the invention with the prior art in Column 9, lines 9-11:

"As indicated at 36, conference participants in both voice and data aspects of a conference still establish parallel voice and data connections over physically or logically separate lines extending to the PSTN and data network."

Comparison of Dunn Figure 5, Reference 23 ("Participants establish separate conference connections...") with Dunn Figure 6, Reference 36 ("Participants establish separate conference connections...") confirms that Dunn does not disclose an automatic establishment of a data connection. Like the prior art in Figure 5, Dunn discloses an invention that requires participants to establish separate voice and data connections on their own. Therefore, Dunn does not teach the limitation of independent Claim 26 of "automatically, and in response to receiving the telephone call ... establishing a virtual data channel from the calling party to the called party over the data network via the subscriber loop."

Further, Berkley does not disclose establishing a voice channel and automatically establishing a virtual data channel in response to receiving a telephone call. Berkley discloses establishing one communications channel in response to a user request. For example, Figure 3A, Reference 301 of Berkley discloses contacting a database to find contact information for another user. The contact address is returned from the database in Figure 3A, Reference 305, and the user establishes a channel using that address in Figure 3A, Reference 306. In Column 13, lines 27-33, Berkley discloses that the user-initiated establishment of the communications channel could occur as a result of the user's database inquiry instead:

"As a further enhancement, the AUR system could, as referred to above in the examples, automatically initiate the communications indicated from the AUR database, such that, for example, a telephone call could automatically be dialed (e.g., in response to a voice command or click-to-dial) or an e-mail message automatically addressed, or a link to a URL address automatically initiated using a Web browser."

In other words, Berkley discloses the user performing one action (instead of two) to initiate a database inquiry and initiate a communications channel using database result. Berkley discloses in Column 13, lines 37-41 that this feature is not limited to the examples provided, noting that "use of any number of communications options indicated to the subscriber through the AUR system could be automatically initiated in accordance with the features of the present invention." Where a communication message is not converted between formats, Berkley only discloses that a single user database query could establish one communications channel. (Figure 3A, Reference 306; Figure 3B, Reference 316; Figure 3C, Reference 326; Claim 11, "The system according to claim 1, wherein the system further initiates a communications contact to the user.") Berkley does not disclose establishment of one communications channel and automatic establishment of another communications channel in response to a single user action. Therefore, Berkley does not teach automatically establishing a data channel in response to receiving a telephone call.

DeSimone does not disclose "automatically, and in response to receiving the telephone call, determining a data address for the calling party on a data network and a data address for a called party on the data network, and establishing a virtual data channel from the calling party to the called party over the data network via the subscriber loop." Figure 1 of DeSimone shows a network of conference participants 101-1 through 101-5 that communicate with a Directory Server 106. Figure 3 of DeSimone describes the sequence of steps required for a user to participate in a conference. If user is authenticated by the Directory Server in DeSimone Figure 3, Reference 305, the Directory Server "provides IP multicast addresses and port numbers for the user's client to transmit on and a list of sockets for each media type for other participants in the

conference to receive on." The channel is not established at this point, because in DeSimone Figure 3, Reference 307, the "user selects clients from which to receive each media type from list of sockets on which other clients are transmitting." Therefore, a channel is not established automatically in DeSimone, because the user makes a selection from a list of available channels (sockets) in order to establish one or more channels when joining a conference.
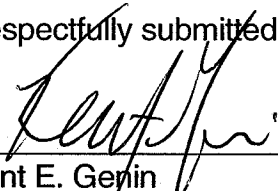
Dunn, Berkley, and DeSimone are missing at least the element of Claim 26 relating to "automatically, and in response to receiving the telephone call, determining a data address for the calling party on a data network and a data address for a called party on the data network, and establishing a virtual data channel from the calling party to the called party over the data network via the subscriber loop." Therefore, any combination of Dunn, Berkley, and DeSimone also lacks this element of independent Claim 26. Applicant respectfully submits that, for at least these reasons, Claim 26 is allowable over the art of record. Claims 28 is a dependent claim, and therefore its allowability directly follows from the allowability of independent Claim 26. Reconsideration is requested.

V.   Conclusion

Applicant submits that this application is in condition for allowance. A Notice of Allowance is respectfully solicited.

Respectfully submitted,

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